

LEAD MINING WITHIN THE ROYAL FOREST OF THE PEAK DURING THE 13TH CENTURY

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Abstract: The discovery at Chatsworth House of an early 17th century perambulation relating to the boundaries of the Royal Forest of the Peak, has enabled the site of the 13th century Wardlow mines to be accurately located. This has resulted in a reappraisal of 13th century lead ore production from within the Royal Forest and the remainder of the High Peak area.

Blanchard (1971) discussed lead ore production in Derbyshire during the period 1195 to 1505. His postulated output levels were derived from the annual value of the Farm, the prices of ore per load and in some instances, on actual quantities of Lot ore taken as duty. For the mines situated within the Royal Forest and the High Peak, these various figures were obtained mainly from Duchy of Lancaster records held in the Public Record Office, London. The same series of financial accounts were examined early this century by Lander and Vellacott and they presented them in a somewhat different format and with a different explanation in the *Victoria County History* (Vol. 2, 1907). The writer has not examined any of the original documents and whilst accepting the actual figures quoted for the value of the Farm and Lot, he does not agree with Blanchard's interpretation of the evidence. Lack of familiarity with the geography of the Derbyshire orefield led Blanchard to make several errors, including a belief that in the first half of the 13th century, the only productive mines in the High Peak and Royal Forest were those at Tideslow, Wardlow and Rotherlowe.

Mining within the Royal Forest appears to have been concentrated at two sites, Tideslow and Wardlow, and also for a very short period at Rotherlowe (referred to by Blanchard as Hucklow). Flooding of the workings at the latter mine ended activity there after only five years work. Fragmentary production records are available from 1194, but between the years 1216 to 1249 a complete run of accounts are extant for the Forest; records for the High Peak are incomplete, but a comparison between the two is possible for the periods 1236 to 1238 and 1243 to 1249.

The location of the Tideslow mines, situated on Tideslow Rake, is readily identifiable, but the mines at Rotherlowe and Wardlow have proved to be more elusive. It is suggested that the Rotherlowe Mine was possibly located where Moss Rake crosses Bradwell Brook. Blanchard (1981) stated that Moss Rake was not worked during the Middle Ages, the depth of the vein being too great. This hypothesis cannot be correct. The Moss Rake vein complex forms one of the major veins of the orefield and its outcrop in the limestone, some 2½ miles in length, was almost certainly exploited from early times.

The village of Wardlow and its immediate surroundings did not lie within the boundaries of the Royal Forest and it has proved difficult to reconcile the apparent anomaly. Blanchard (1981) believed that the Wardlow mines were situated on a south eastern extension of Tideslow Rake, passing through Wardlow and reaching as far as Stoney Middleton. It is difficult to understand how Blanchard arrived at this conclusion because no vein exists with such an alignment.

It is now possible however, to locate the Wardlow mines as being situated on Cop Rake, at the extreme western end of Bradwell Moor. Recently, an early 17th century perambulation was found (Chatsworth, Hardwick Documents), which defined both the outer Forest boundary and also the line of the ring wall of the inner deer park. The document states that the wall ran from:-

Lords Seat - at the topp of Rushopp Edge; thence to Mamm yate and from thence to a place called Oxelowe Crosse - thence to

Cuningdale head - from thence to Torbett Brincke; thence following to the topp of that Brincke to Wardlow Copp; thence to the Grey moore stone at the head of Brockdale.*

The route can be followed quite clearly on modern maps and in fact coincides with the present boundary of Peak Forest parish. Wardlow Copp can therefore be positively identified and is within a few yards of where a well defined lead vein, known as Cop Rake, cuts through the boundary between Bradwell Liberty and Peak Forest Liberty.

The location of Rotherlowe is not quite so easily proven, but the suggested position, close to the water table, would explain the difficulties with flooding. Another document delineating the outer boundary of the Forest is helpful. The document is dated 1274 (Evans, 1912) and together with evidence from later boundary perambulations, places Rotherlowe somewhere between Bradwell Brook and Bradwell Dale. Admittedly, this information is rather vague, but the only feasible site where this section of the Forest boundary crossed a mineral vein appears to be at the lower end of Moss Rake, adjacent to Bradwell Brook head. One alternative location for Rotherlowe must be examined. North of Bradwell village a conspicuous mound of reef limestone is known as Edentree. There was some small scale mining activity here in 1731 (Chatsworth, Devonshire Coll.). The mound, being so easily identified as a landmark, could be the site of Rotherlowe, but the absence of definitive signs of mining activity seems to preclude Edentree as the location of Rotherlowe.

Field evidence is interesting because at both Tideslow Rake and Cop Rake there are very distinctive, large, furrow-like trenches, about ten to twenty feet in depth and several hundred feet in length. Without further archaeological investigation it is impossible to prove that these trenches are the remains of 13th century lead mining operations, but as will be demonstrated later, the quantity of ore raised from these mines for nearly half a century was considerable and would result in large scale excavations. Similar large trenches exist at several sites throughout the orefield, for example at the nearby Oxlow Rake; on the western end of Moss Rake; Longstone Edge Old Vein and elsewhere. Recent work by the author (in preparation), relating to the technological development of Derbyshire mining before

* Not to be confused with Wardlow village.

TABLES OF ORE PRODUCTION

Ore Production, Royal Forest of the Peak, Tideslow mines.

Year.	Farm.	Price/load.	Lot. ld. d	Total. ld. d
1216-1234	£2-10-0	1/10d*	27-2	358-8
1234-1237	£2-10-0	1/9½d**	27-5	358-2
1237-1242	£2-10-0	1/7d	31-5	410-2
1242-1249	£2-10-0	1/6d	33-3	433-3

The output from the Tideslow mines between the years 1216 and 1249 was therefore very nearly 13000 loads of ore, representing about 3200 tons of galena.

Ore production, Royal Forest of the Peak, Wardlow Mines.

Year.	Farm.	Price/load.	Lot. ld. d	Total. ld. d
1216-1234	£2-00-0	1/10d*	21-8	284-5
1234-1237	£1-10-0	1/9½d**	16-5	215-2
1237-1242	£1-06-0	1/7d	16-4	213-7
1242-1248	£1-06-8	1/6d	17-7	231-1
1248-1249	£1-16-8	1/6d	24-4	317-7

The output from the Wardlow mines during the same period as above was about 9300 loads.

Ore production, Royal Forest of the Peak, Rotherlowe mines.

Year.	Farm.	Price.	Lot.
Total.		/load	ld. d
1242-1247	£0-13-4†	1/6d	8-8

The total production for the five years was just under 580 loads.

Ore production, mines within the remainder of the High Peak.

Year.	Farm.	Price /load.	Lot. ld. d	Total. ld. d
1236-1237	£6-18-2	1/9½d*	76-6½	997-3½
1237-1238	£5-10-0	1/7d	69-4½	404-4½
1243-1244	£5-17-0	1/6d	78-0	1014-0
1245-1246	£5-0-7	1/6d	67-0	871-0
1247-1248	£4-2-0	1/6d	54-6	710-6
1248-1249	£4-0-0	1/6d	53-3	693-3

* actual price per load not known, it was 2/- in 1195. The proportion of lot ore and hence the total production have been estimated based on the price/load.

** the price is not absolutely accurate, but is the best approximation.

† The Farm amounted to £3-6-8 in five years.

1650, suggests that such trenches may pre-date the narrow, opencast stopes, usually from 20 feet to 50 feet in depth, excavated into rich ribs of ore along most veins before 1600.

If the postulated position of Rotherlowe mine on Moss Rake is correct, field evidence is not available, as unfortunately subsequent building development has virtually obliterated all traces of lead mining hereabouts. Consideration must now be given to the ore accounts. Contrary to Blanchard's hypothesis, it is possible to calculate separate production levels for the mines lying within the Royal Forest and mines within the remainder of the High Peak. He assumed that during the period here under consideration, mining in the High Peak was confined to those workings which lay within the Royal Forest. This assumption is incorrect and a careful analysis of the available evidence shows that mines were in operation simultaneously in both areas.

Blanchard (1971) demonstrated a direct correlation between the value of the lease of the Farm and the quantity of lot ore collected; in other words, the lessee obtained lot ore exactly to the value of the annual Farm. This duty was taken as 1/13th of all ore raised, so therefore by simple multiplication the total ore production for that period may be obtained.

The lessees of the Farm were usually lead merchants who were thus able to maintain a very tight control of production, prices, smelting and sale of the metal product.

Turning now to the accounts, in order to appreciate that the Royal Forest and the High Peak were considered as two separate mining areas, it is necessary to examine individual periods of time.

For example, from 1234 to 1237, the value of the Farm within the Forest amounted to £4/annum (VCH, Vol 2, 1907 and Blanchard, 1971), yet in 1236 and 1237 the Farm for the High Peak mines amounted to £6-18-2. Similarly, from 1242 to 1248, the Forest Farm was £4-10-0, whilst the High Peak rendered very irregular figures ranging from £2-0-0 to £5-17-0. Any thoughts that the latter figures represent the Royal Forest Farm plus 'extras' are quickly dispelled by realising that in 1243 and 1247, 1248 and 1249, they are lower in value than the Farm for the Forest mines.

Prices per load of ore are known for the period 1234 to 1249. But clearly it becomes possible to calculate ore production for that period. Using some reasonable projections, based on the consistency of the Farm for the Tideslow mines from 1216 until 1249, ore production within the Forest for the period 1216 to 1234 has been postulated.

The accounts in the tables above demonstrate the importance of the 13th century Peak mining fields. Before the end of the century mines were at work in Taddington, Monyash, Over Haddon, Hucklow and Castleton within the High Peak and Royal Forest jurisdictions, whilst production is also recorded at Haslebadge, Stoney Middleton, Meadow Place Grange,

Youlgreave, Winster, Cromford and elsewhere.

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